IN THE CLAIMS

The pending claims are set forth as follows:

1.   (Original) A method of representing an arc, the method comprising:

selecting multiple vertices of the arc;

determining trapezoids corresponding to the vertices;

obtaining a texture having multiple rows that transition from dark to light to dark; and

mapping the texture to the trapezoids.

2.   (Original) The method of claim 1 wherein the trapezoids extend along the arc between adjacent vertices.

3.   (Original) The method of claim 2 wherein a shorter side of the trapezoid extends between an intersection of the vertices and inner edges of the arc, forming a chord.

4.   (Original) The method of claim 3 wherein a longer side of the trapezoid comprises a tangent to an outer edge of the arc.

5.   (Original) The method of claim 4 wherein equal sides of the trapezoid are collinear with the adjacent vertices.

6.   (Original) The method of claim 1 wherein the texture comprises multiple columns corresponding to radials of the arc.

7.   (Original) The method of claim 6 wherein the texture is rectangular, and is symmetrical about the center of the rectangular texture patch and, by association, about the center of the trapezoids enabling bi-directional rendering for efficient quadrilateral or triangular meshes.

8.   (Original) The method of claim 7 wherein a line profile is applied to each column of the rectangular texture to reduce aliasing effects.

9.   (Original) The method of claim 7 and further comprising super sampling anti-aliasing profiles in column dimensions to reduce aliasing effects.

10.   (Original) The method of claim 1 wherein a final trapezoid required to complete the arc is a fraction of the full trapezoids, and where the standard texture is used for the final trapezoid and where the perspective texture coordinates are adjusted such as to draw the final segment without distortion.

11.   (Original) The method of claim 1 wherein the trapezoids are represented by triangles prior to mapping the texture to them.

12.   (Original) The method of claim 1 wherein the texture is rectangular, and is mapped into the trapezoids such that each column of the rectangular texture is mapped along a radial bounded by the tops and bottoms of the trapezoids.

13.   (Original) A method of representing an arc, the method comprising:
        selecting multiple vertices of the arc;
        obtaining trapezoids corresponding to the vertices;
        obtaining a texture having multiple columns of texels;
        representing the trapezoids as triangles; and
        mapping the texture to the triangles.

14.   (Original) The method of claim 13 wherein a line profile is applied to each column of the texture to reduce aliasing effects.

15.   (Original) The method of claim 14 wherein the line profile comprises a column of texels transitioning from dark to light to dark.

16.   (Original) The method of claim 13, wherein the texture is symmetrical about a midline of the trapezoids.

17.   (Original) The method of claim 13 and further comprising applying a reverse perspective view transformation to individual columns of texels of the texture.

18.   (Original) The method of claim 13 wherein each column of texels represents a single radial bound spatially by trapezoid upper and lower chords.

19.   (Original) The method of claim 13 wherein obtaining a texture comprises selecting a texture from a number of textures based on the size of the radius and line width of the arc.

20.   (Original) The method of claim 13 wherein texture is rectangular, and is mapped into the trapezoid such that each column of the rectangular texture is mapped along a radial bounded by the top and bottom of the trapezoids.

21.   (Original) A system for representing an arc, the system comprising:
       means for selecting multiple vertices of the arc;
       means for determining trapezoids corresponding to the vertices;
       means for obtaining a texture having multiple rows that transition from dark to light to dark; and
       means for mapping the texture to the trapezoids.

22.   (Original) The system of claim 21 wherein the trapezoids extend along the arc between adjacent vertices.

23.   (Original) The method of claim 22 wherein a shorter side of the trapezoid extends between an intersection of the vertices and inner edges of the arc forming a chord.

24.   (Original) The method of claim 23 wherein a longer side of the trapezoid comprises a tangent to an outer edge of the arc.

25.   (Original) The method of claim 24 wherein equal sides of the trapezoid are collinear with the adjacent vertices.

26.   (Original) The method of claim 21 wherein the texture comprises multiple columns corresponding to radials of the arc.

27.   (Original) The method of claim 21 wherein the means for obtaining a texture comprises:
        a memory for storing multiple textures; and
        a selection module that selects a texture from the stored multiple textures based on the size of the radius and line width of the arc.

28.   (Original) A system for of representing an arc, the system comprising:
        a module that divides the arc into multiple vertices;
        a module that creates trapezoids corresponding to the vertices;
        a module that obtains a texture having multiple columns of texels;
        a module that represents the trapezoids as triangles; and
        a module that maps the texture to the triangles.

29.   (Original) The system of claim 28 wherein a line profile is applied to each column of the texture to reduce aliasing effects.

30.   (Original) The system of claim 29 wherein the line profile comprises a column of texels transitioning from dark to light to dark.

31.   (Original) The system of claim 28 wherein each column of texels represents a single radial of the arc bound spatially by trapezoid upper and lower chords.

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Page 6
Dkt: H0005180 (SBE 1611)

32.   (Original) The system of claim 28 wherein the module that obtains a texture selects the texture from a number of textures based on the size of the radius and line width of the arc.

33.   (Original) The system of claim 28 wherein the texture is a rectangle.